

Climatological Data for October, 1909.
DISTRICT No. 7, LOWER MISSISSIPPI VALLEY.

ISAAC M. CLINE, District Editor.

GENERAL SUMMARY.

During the first week of the month the weather was warm throughout the district; the highest temperatures occurred on the 1st or 2d in the western and from the 4th to 6th in the eastern portion of the district, except in some localities where they were recorded from the 14th to 16th. A change to decidedly cooler took place about the 6th in the western and the 8th in the eastern portion of the district, culminating in unseasonably low temperatures and killing frosts over the northern and western portions of the district. The cool weather continued until the close of the month, except that some of the day temperatures were rather high. The lowest temperatures occurred generally on the 12th or 13th and from the 24th to 26th. The mean temperature was about the normal, or above, except over the western and extreme eastern portions of the district, where there was a deficiency. Monthly mean temperatures and departures from the normal for the various States and areas are reported as follows: Missouri area, 58.6° , $+0.7^{\circ}$; Kansas area, 58.2° , 0.0° ; Colorado area, 50.2° , $+1.0^{\circ}$; New Mexico area, 53.9° , -0.5° ; Texas area, 62.1° , $+1.4^{\circ}$; Oklahoma, 62.0° , $+0.1^{\circ}$; Arkansas, 63.0° , $+1.1^{\circ}$; Tennessee area, 60.0° , $+0.2^{\circ}$; Mississippi area, 64.5° , $+0.7^{\circ}$; and Louisiana, 68.5° , $+1.6^{\circ}$.

The precipitation occurred in the Colorado area mostly during the first decade, while over the remainder of the district there were two well-defined rainy periods; the first prevailed generally from the 6th to the 11th, and the second from the 17th to the 20th. The last decade of the month was practically without rain, except that showers occurred generally over the northern portion of the district on the last day of the month. There was a deficiency over the eastern portion of the district and over that portion lying between the ninety-fifth and ninety-seventh meridians, while between the ninety-third and ninety-fifth, and ninety-seventh and ninety-ninth meridians there was a general excess. Over the remainder of the district, the departures were irregular, being about the normal in some localities and below in others. Monthly amounts with departures from the normal, for the various States and parts of States, are reported as follows: Missouri area, 1.95 , -0.44 ; Kansas area, 2.01 , -0.12 ; Colorado area, 0.94 , -0.27 ; New Mexico area, 1.52 , $+0.56$; Texas area, 1.89 , -0.67 ; Oklahoma, 2.19 , -0.20 ; Arkansas, 2.15 , -0.21 ; Tennessee area, 1.26 , -1.14 ; Mississippi area, 1.00 , -1.06 ; Louisiana, 2.09 , -0.54 .

TEMPERATURE.

The mean temperature was below the normal over that portion of the Colorado area lying to the east of the Front Range, the New Mexico area, southwestern Oklahoma, the northeastern portion of the Missouri area, and the eastern portions of the Tennessee and Mississippi areas, and was about normal or above elsewhere. The greatest excess in temperature, amounting to more than 3° , occurred over southeastern Louisiana; elsewhere the excess ranged from 0.2° to 2.9° . Over those portions of the district where the mean temperature was below the normal, the departures ranged from 0.1° in Colorado and New Mexico to 2.5° over southwestern Oklahoma. The highest monthly mean temperature was 76.7° , at Burnside, Ascension Parish, La., and the lowest was 38.3° , at Lake Moraine, El Paso County, Colo. The monthly maximum reached, or exceeded, 90° at some stations in each State in the district, except in the New Mexico area, and the maximum was above 95° at a large number of stations in Oklahoma, Arkansas, Louisiana, and the Texas and Kansas areas. The highest temperature recorded in the district was 99° , at Hartshorn, Pittsburg County, Okla., on the 1st. A maximum tempera-

ture of 98° was recorded at Bee Branch, Van Buren County, and Portland, Ashley County, Ark., on the 5th. The average of the daily maximums exceeded 80° at 1 station in Oklahoma, 2 stations in the Mississippi area, and at practically all stations in Louisiana. The lowest temperature recorded was -5° at Elizabethtown, Colfax County, N. Mex. Minimum temperatures of 32° , or lower, were recorded in all parts of the district except over the greater portion of Louisiana and at scattered stations in Oklahoma, Arkansas, and the Texas and Mississippi areas. Zero temperatures were recorded in the mountainous portions of the Colorado and New Mexico areas, and in the more elevated portions of these areas the monthly mean minimum was well below 32° . Killing frosts occurred on the 12th or 13th, except in Louisiana, the eastern portion of the Texas area, and southeastern Arkansas, and on the 25th frost occurred southward into Mississippi and northern Louisiana.

PRECIPITATION BY DRAINAGE AREAS.

Arkansas River and tributaries.—The precipitation was unevenly distributed over this drainage area. The amounts were generally light, except in central Kansas, north-central Oklahoma, and northwestern Arkansas. Over the Colorado area, the average for 31 stations was 0.9 inch, which is about 0.3 inch below the normal. More than 2 inches occurred at only 1 station and there was less than 0.5 inch at 4 stations. There was an increase in the precipitation from the Colorado line to the ninety-seventh meridian and the average amount deduced from the 33 stations in this area was 3.3 inches, which is about 0.2 inch above the normal. Six stations reported more than 3 inches and 5 stations less than 1 inch. Over the Cimarron Basin, the precipitation ranged from 0.38 inch over the headwaters to 5.05 inches over north-central Oklahoma. The average amount determined from 20 stations was 2.3 inches, which is about 0.5 inch above the normal. More than 4 inches occurred at 3 stations and only 2 stations reported less than 1 inch. Over the headwaters of the Canadian, in New Mexico, the precipitation ranged generally between 1 and 2 inches. The average amount determined from 26 stations was 1.7 inches, which is about normal. Over that portion of the Canadian Basin, from the Colorado line to its junction with the Arkansas, the precipitation was generally more than 2 inches. The average determined from 16 stations was 2.2 inches, which is about normal. The precipitation over the Neosho and Verdigris valleys and the Arkansas proper, from the ninety-seventh meridian eastward to the Arkansas line, was less than to the west and east of this area. The amounts ranged generally between 1.5 and 3 inches. The average amount deduced from the reports of 22 stations was 2.1 inches, which is slightly below the normal. In the Arkansas Basin, from Fort Smith to its junction with the Mississippi, the average was 3.3 inches, which is nearly 1 inch above the normal. There was a decided excess above Little Rock, but below that station there was a marked deficiency. Excessive precipitation (2.50 inches, or more in twenty-four hours) occurred as follows: Miami, Tex., Canadian watershed, 2.50 inches on the 18th; Dacoma and Okeene, Okla., Cimarron watershed, 2.80 and 2.60 inches, respectively, on the 18th.

Red River and tributaries.—Over this drainage area the precipitation was light, except in northeastern Texas and southwestern Arkansas and at a few stations in southwestern Oklahoma. From the headwaters to the ninety-seventh meridian, the monthly amounts ranged generally between 1 and 2 inches, and the average deduced from 22 stations was 1.5 inches, which is about 0.7 inch below the normal. Three stations reported more than 2 inches and 2 stations reported less

than one inch. From the ninety-seventh meridian to the Louisiana line the amounts were greater and ranged generally between 2 and 4 inches. The average amount determined from 18 stations in this area was 2.5 inches, which is slightly above the normal. Four stations reported less than 2 inches and 2 stations more than 4 inches. Below the Louisiana line the precipitation ranged from 1.35 inches to 4.10 inches, and the average amount deduced from 9 stations was 2.0 inches, which is about 0.9 inch below the normal.

Mississippi south of St. Louis and small tributaries.—Except in widely scattered localities, the precipitation was light throughout this drainage area. In the immediate Mississippi Valley, from St. Louis southward to the coastal plain, the precipitation reported from 41 stations averaged 1.3 inches, and exceeded 2 inches at only 5 stations. The greatest monthly amount was 2.87 inches at Corinth, Miss. Twelve stations reported less than 1 inch and 3 stations less than 0.5 inch. The precipitation was below the normal, except at 2 stations, and the average deficiency was about 1 inch. In the valley of the Meramec, the precipitation ranged from 0.37 inch to 3.03 inches and the average was 2 inches, which is about 0.5 inch below the normal. Over the valley of the White, the precipitation was unevenly distributed. The monthly amounts ranged from 0.51 inch over the upper portions of the basin to 4.31 inches at Mossville in the western portion, and the average was 1.8 inches. The precipitation over this drainage basin was above the normal over the western portion and decidedly below the normal elsewhere; the average deficiency was about 0.5 inch. Over the valleys of the Yazoo and Big Black the precipitation ranged from a trace to 1.89 inches. The average determined from the reports of 11 stations in the Yazoo Basin was 1 inch, which is about half the normal amount; 4 stations reported less than 0.5 inch. Out of 7 stations in the valley of the Big Black only 2 stations reported more than 1 inch and 3 stations reported less than half an inch; the average was 0.8 inch, which is 1.5 inches below the normal. In the valley of the Ouachita, the precipitation was more uniformly distributed than elsewhere in the lower Mississippi Valley. The monthly amounts ranged from 0.90 inch to 3.56 inches, and the average for 18 stations was 2.1 inches, which is 0.3 inch below the normal. There was a general deficiency over this drainage area, except in southwestern Arkansas, where there was an excess ranging from 0.56 inch to 1.22 inches.

Louisiana coastal plain.—The precipitation over this area ranged from 0.10 inch at Burrwood, Plaquemines Parish, to 3.70 inches at Audubon Park, New Orleans, Orleans Parish. The precipitation was below the normal over the entire coastal plain, except in Orleans Parish and the northern portion of Tangipahoa Parish. The deficiency averaged about 1 inch. The rainfall was excessive at 1 station, Audubon Park, where 3.41 inches fell on the 19th.

RIVERS.

The Arkansas and its tributaries were low throughout the month, except that there were freshets in some of the small streams in north-central Oklahoma and southern Kansas. At Little Rock, the highest stage was 1.1 feet at the opening of the month and the lowest was 0.3 foot from the 25th to 28th, in-

clusive. A slight rise was recorded at Little Rock at the close of the month. No material changes in the stages of the Red River were recorded. The stages at Arthur City ranged from 4.5 feet to 5.4 feet. At Fulton, Arkansas, from 4.8 feet to 5.4 feet; at Shreveport, La., from -4.4 feet to -3.5 feet; and at Alexandria, La., from -0.5 foot to 1.1 feet. A rise of 3.2 feet was recorded on the Ouachita at Camden on the 12th and 13th, otherwise changes in this stream were slight. The lower Mississippi changed very little. At Memphis there was a rise of 2.1 feet from the 18th to the 26th, but the stage at the close of the month, 6.7 feet, was 1.4 feet below that on the 1st. The above rise reached Helena on the 22d, Vicksburg on the 26th, Natchez on the 27th, and New Orleans on the 29th. The stages were lower at the close of the month than they were on the 1st, except at New Orleans.

NOTES.

There are several thousand acres of swamp land in southern Louisiana susceptible of reclamation. The increasing interest in the sugar and rice industries will make it necessary, in the near future, to prepare these lands for cultivation. Mr. A. M. Shaw, Expert in drainage investigations, U. S. Department of Agriculture, in a recent communication to this office, makes the following comments in this connection:

In all of the lands that are in need of drainage, a definite knowledge of the amount of water to be drained off during each month is important, but in the lands along the coast, where only artificial drainage is possible, a definite knowledge of the precipitation is an absolute necessity for the proper design of the drainage works. In connection with Prof. W. B. Gregory, of Tulane University, I have been making an especially detailed study of conditions on a few typical tracts, and in this work have established rain gages on each tract; in some cases, two gages have been placed on each plantation. It is not expected, however, that these separate gages will be maintained indefinitely, but as soon as the studies now under way have been kept up for a sufficient length of time to make deductions from them possible, the information obtained will be applied to other localities where the Department will have to depend entirely on the rainfall records which may be obtained from the Weather Bureau or other sources. As soon as the results of the investigations now being made are available for the use of the engineers of this territory, it is very probable that a much wider demand for data from your office will result. One reason that engineers (outside of those in the rice country) have made little use of the records of the Bureau heretofore is because of the difficulty of application of the data from the Bureau. With the additional information which it is hoped we will be able to develop, the records kept by the Weather Bureau will play an important part in the reclamation of the swamp lands of the State.

In this connection, it is interesting to note the wide variation in rainfall at points only 1 or 2 miles apart. In some cases there is a marked difference, not only in the daily but in the monthly precipitation.

Reports giving the daily discharges of the Arkansas River at Canon City, Colo., for July, August, September, and October have been furnished by the Water Resources Branch of the United States Geological Survey. These reports show a gradual decrease in the discharges from July 1 to August 14. The greatest discharge recorded during the four months occurred on August 18 and resulted from cloudbursts near the Royal Gorge. The heavy precipitation during the early part of September is shown in the increased discharge during the first decade of that month. The discharge diminished generally from September 10 to October 31. The area drained is 3,060 square miles and the run-off in acre-feet for July was 124,000; August, 73,800; September, 82,700; and October, 41,300.

TABLE 1.—Climatological data for October, 1909. District No. 7, Lower Mississippi Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days.	Number of partly cloudy days.	Number of clear days.	Number of partly cloudy days.	Prevailing wind direction.	Observers.					
				Mean.	Departure from the normal.		Highest.	Date.	Lowest.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.										
					Highest.	Date.																		
<i>Colorado.</i>																								
Blaine.	Baca.	3,935	17	54.2	-0.8	87	4	27	26	45	0.29	-0.49	0.15	0.0	3	17	11	3	sw.	M. M. Meyers.				
Buena Vista.	Chaffee.	7,955	9			77	2†	20	25	48	1.27	0.67	1.0	3	20	9	2	sw.	M. D. Bowen.					
Calhan.	El Paso.	6,700	2	47.5		82	2	27	19	42	0.99	+0.19	0.58	0.0	5	15	15	1	e.	H. B. Rice.				
Canon City.	Fremont.	5,320	21	56.1		76	2	24	25	44	0.57	-0.11	0.41	0.0	4	21	6	4		Thomas J. Tynan.				
Colorado Springs.	El Paso.	6,008	30	50.0	+1.7															Colorado College.				
Cripple Creek.	Teller.	9,396	0																	F. G. Willis.				
Cuchara Camps.	Huerfano.	8,200																		George A. Mayes.				
Eads.	Kiowa.	4,308	2	53.3		87	3	23	30	56	1.35	1.55	0.72	7.0	6	21	7	3	sw.	W. H. Lauck.				
Fairview.	Custer.	9,500																		Elizabeth L. Gray.				
Florence.	Fremont.	5,185		55.2		88	1†	25	9	45	0.55	0.40	0.0	2	24	0	7	e.	W. G. Fish.					
Garfield.	Chaffee.	9,510																	Lloyd N. Felton.					
Glen Eyrie.	El Paso.	6,500	17	48.6	+0.4	81	2	17	9	51	0.51	-0.41	0.42	T.	3	23	8	1	w.	C. Nickell.				
Hamps.	Elbert.	5,400	16	48.4	-0.7	78	2†	18	25	50	0.85	+0.26	0.47	0.5	3	18	8	5	s.	W. Hamp.				
Hermit Lake.	Custer.	10,000																	Jno. E. Graham.					
Hoehne (near).	Las Animas.	5,700	17	54.0	+2.4	87	4	23	9	53	0.25	-0.70	0.25	T.	1	20	9	2	sw.	S. W. DeBusk.				
Holly.	Prowers.	3,380	14	55.4		95	2	26	27	57	0.76	+0.17	0.40	T.	3	22	6	3	se.	R. I. Arneson.				
Lake Moraine.	El Paso.	10,265	15	58.3	+1.1	61	2	7	9	31	0.82	-1.00	0.36	7.8	7	21	3	sw.	Joseph Strong.					
Lamar.	Prowers.	3,592	19	54.4	-0.8	90	2	27	28	55	0.53	-0.50	0.43	0.0	2	20	10	1	se.	J. T. Lawless.				
Las Animas.	Bent.	3,899	41	54.8	+1.8	90	2	27	24	55	1.46	+0.75	0.78	0.0	2	22	3	7	e.	F. M. Tague.				
La Veta Pass.	Costilla.	9,000																	Norvin B. Lively.					
Leadville.	Lake.	10,243	13	38.8	+1.8	65	2	19	8	35	0.81	-0.08	0.34	T.	6	28	1	2	ne.	U. S. Weather Bureau.				
Limon (near).	Elbert.	5,360	2	49.0		81	2	25	9†	41	1.20	0.84	0.0	T.	3	23	5	3	w.	John Lesher.				
Marshall Pass.	Saguache.	10,946	6																W. D. Lillard.					
North Lake.	Las Animas.	8,700																	Guy H. Crane.					
Pueblo.	Pueblo.	4,734	21	52.2	-0.1	82	2	26	19	48	0.25	-0.46	0.16	8.5	6	20	6	5	nw.	U. S. Weather Bureau.				
Rockyford (near).	Otero.	4,177	20	53.4	+0.6	89	3	24	23	60	0.90	0.00	0.83	0.0	2	29	1	1	w.	P. K. Blinn.				
St. Elmo.	Chaffee.	9,500																	Daniel Clark.					
Salida.	do.	7,035	11	48.1	+1.1	80	2	14	12	52	0.56	-0.60	0.28	T.	3	26	2	3	w.	M. D. L. Buell.				
Santa Clara.	Huerfano.	8,250	14	48.0	+3.6	73	2	13	9	43	1.10	-1.17	0.67	5.0	4	13	17	1		Lincoln Morris.				
Sheridan Lake.	Kiowa.	4,068	8	55.1		86	4	23	25	53	0.55	-0.45	0.45	0.0	2	28	0	3	sw.	Howard Gamble.				
Stonehill.	Las Animas.	3,000	3																Mrs. Maggie Butler.					
Trinidad.	do.	5,994	14																Fred Jones.					
Victor (near).	Teller.	10,100	5	45.6		68	2	14	9	33	1.02	-0.55	0.65	5.2	3	25	5	1	n.	Carrie Konkel.				
Vilas.	Baca.	3,935	19																Zack Jordan.					
Westcliffe.	Custer.	7,884	15	45.6	+2.0	75	1†	-4	9	52	1.10	-0.16	0.49	6.0	4	15	12	4	sw.	John G. Payne.				
Wheffield.	Chaffee.	9,765																	G. Wortman.					
Wormtong.	Lake.	11,250	9																					
<i>New Mexico.</i>																								
Abbott.	Mora.	5,771																	Agt. E. P. & S. W. Ry.					
Albert.	Union.	4,700	19	57.8	-0.1	86	14	35	9	44	1.12	0.43	T.	4	26	3	2	w.	Andrew Knell.					
Arch (near).	Roosevelt.			59.8		85	14	30	27	39	+0.27	1.50	0.0	4	22	2	7	s.	Wm. A. Elliott.					
Aurora.	Colfax.	8,849																	Miss Juanita Lucero.					
Bell Ranch.	San Miguel.	4,500	5	57.3		89	1	31	24	52	1.03	1.20	0.0	4	22	8	1	s.	C. M. O'Donel.					
Black Lake.	Colfax.	8,343																	Ralph T. Martinez.					
Cabesa.	San Miguel.	5,406																	Agt. E. P. & S. W. Ry.					
Campana.	do.	4,493																	Do.					
Chacon.	Mora.	9,000																	Alfred Lucero.					
Cimarron (near).	Colfax.	6,395	4	50.7		80	16	23	9†	52	0.49	1.85	16.8	4	12	15	4	sw.	Wm. French.					
Clayton.	Union.	5,173	5	55.0		80	1	29	9	44	1.11	0.80	0.0	4	22	8	1	w.	Dr. W. W. Chilton.					
Cuervo.	Guadalupe.	4,849		59.4		85	1	34	9	37	0.80	0.57	T.	3	20	6	5	nw.	Agt. E. P. & S. W. Ry.					
Dawson.	Colfax.	6,396																	Do.					
Dorey (near).	do.	6,000	8																Geo T. Lambert.					
Elizabethtown.	Mora.	8,465	3	41.1		71	1	-5	9	52	1.33	0.43	9.0	5	21	8	2	w.	Miss Mabel Carrington.					
Fort Union.	do.	6,835	40	48.0	-2.5	80	1	13	9	50	1.45	+0.40	0.90	4.0	5	23	5	3	w.	M. C. Needham.				
Hayden.	Union.	4,444		53.2		78	1	30	21†	22	1.51	1.12	0.0	3	12	11	8	sw.	George L. Cook.					
Lake Alice.	Colfax.	7,180																	Raton Water Co.					
Logan.	Quay.	3,851	3	58.0		89	16	29	27	50	1.04	1.50	0.0	5	24	3	4	s.	John B. Renau.					
Los Alamos.	San Miguel.	6,789																	Wm. Frank, sr.					
Maxwell (near).	Colfax.	5,894	3																D. N. Jackson.					
Melrose.	Curry.	4,400	1	57.1		88	16	26	12	49	T.	T.	T.	0.0	0	26	2	3	sw.	Miss Lois E. Porter.				
Miami Ranch.	Colfax.	6,000	2	50.6		80	1†	20	9	51	0.96	0.59	1.0	0.0	4	22	5	4	sw.	Farmers' Devel. Co.				
Montoya.	Quay.	4,335																	Agt. E. P. & S. W. Ry.					
Nara Visa.	do.	4,225	4	57.6		85	16	33	12	41	2.36	1.48	0.0	5	21	5	5	s.	Willard Belknap.					
Raton.	Colfax.	6,680	12	52.3	+1.1	80	3	29	9	44	1.14	+0.44	0.45	1.0	9	22	5	4	s.	Prof. R. C. Crum.				
Rochado.	San Miguel.	8,200	6	46.2		75	1†	6	9	50	1.39	0.45	8.0	9	15	12	4	s.	Chas. F. Rudolph.					
Roy.	Mora.	5,884																	Agt. E. P. & S. W. Ry.					
San Jon.	Colfax.	4,400	1	57.1		88	16	31	12	37	2.06	1.17	0.0	3	21	0	10	sw.	Jesse T. White.					
Salano (1).	Mora.	4,200	3	59.4		88	18	31	12	37	2.06	1.21	0.0	6	20	5	6	sw.	F. M. Hughes.					
Salano (2).	do.	5,622		52.2		83	1	30	9†	47	2.36	1.37	T.	5	23	4	4	sw.	Agt. E. P. & S. W. Ry.					
Springer.	do.	5,622																	Agt. A. T. & S. F. Ry.					
Taylor.	Colfax.	5,857	14	50.0		82	1	20	29	55	1.00	0.50	0.0	4	24	4	3	n.	Agt. A. T. & S. F. Ry.					
Treminta.	do.	5,661	2																Miss Alice Blake.					
Tucumcari (1).	San Miguel.	2,719																	John F. Seaman.					
Tucumcari (2).	Quay.	4,194	5	60.4		88	1†	34	27	47	1.90	1.39	0.0	4	25	5	1	sw.	Agt. E. P. & S. W. Ry.					
Vernonjo Park.	Colfax.	7,600	6	46.8		74	1	14	9	48	1.07	0.												

TABLE 1.—*Climatological data for October, 1909. District No. 7—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.				Observers.	
				Mean.	Departure from the normal.			Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
					High.	Date.	Greatest daily range.														
Texas—Cont'd.	Ochiltree.	1	—	59.6	87	13	30	11	41	2.35	—	1.85	0.0	2	—	—	—	—	—	S. T. Allen.	
Pampa.	Gray.	3,226	20	63.2	+ 2.6	95	17	39	10	43	1.74	- 0.65	1.07	0.0	3	21	0	8	s.	B. E. Finley.	
Paris ^a .	Lamar.	592	20	57.4	—	89	2	29	27	50	2.28	—	1.80	0.0	3	21	5	5	n.	N. O. Enloe.	
Plemons.	Hutchinson.	2	—	64.0	—	95	18	36	12	53	1.13	—	0.90	0.0	2	22	2	7	s.	C. S. Solomon.	
Quanah.	Hardeman.	1,563	4	64.0	—	89	5	42	24	38	2.01	- 1.23	1.52	0.0	3	24	1	6	s.	E. E. Miller.	
Sherman.	Grayson.	745	16	67.4	+ 1.0	99	17	34	10	50	2.01	+ 1.63	4.00	0.0	3	18	10	3	s.	R. A. Gibbs.	
Sulphur Springs.	Hopkins.	530	17	68.3	+ 1.5	93	17	43	10†	59	5.09	+ 1.63	1.30	T.	1	15	14	2	s.	W. B. Baxter.	
Texline.	Dallam.	4,894	4	—	—	90	13†	23	12	55	1.65	—	1.52	0.0	3	15	0	5	s.	Agt. Ft. W. & D. C. Ry.	
Tulia.	Swisher.	3,501	11	55.4	—	90	13†	23	12	55	1.50	—	1.50	0.0	1	26	0	5	s.	Lou Mulhall.	
Wichita Falls.	Wichita.	958	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	s.	J. B. Nicholson.	
Kansas.	Anthony.	1,329	12	59.1	—	93	4	25	12	45	3.64	+ 1.37	1.29	0.0	7	17	8	6	sw.	R. H. Beebe.	
Ashland.	Clark.	1,951	2	58.4	—	90	17	31	13	49	2.92	—	1.00	0.0	10	20	4	7	n.	C. W. Carson.	
Burlington.	Coffey.	1,010	16	58.3	- 1.1	94	1	25	12	46	2.28	- 0.14	1.03	0.0	5	17	7	7	s.	A. W. Maxwell.	
Chanute.	Neosho.	940	5	60.8	—	94	1	25	12	45	1.51	—	0.90	0.0	3	15	12	4	s.	Chase W. Brown.	
Cimarron.	Gray.	2,700	3	55.8 ^b	—	90 ^b	2	27 ^b	13	49 ^b	0.88	—	0.35	T.	5	17	6	6	sc.	Fred Mallonee.	
Coldwater.	Comanche.	2,090	11	58.8	—	88	17	27	13	40	1.32	- 0.43	0.51	T.	6	21	3	7	s.	J. L. Stanley.	
Columbus.	Cherokee.	898	15	59.6	+ 0.7	90	27	24	12	38	3.05	+ 0.02	1.55	0.0	5	21	1	9	sw.	O. E. Skinner.	
Coolidge.	Hamilton.	3,346	13	54.2	+ 1.0	90	2	25	12	41	1.11	+ 0.12	0.69	0.0	3	18	8	5	se.	W. R. Padley.	
Cottonwood Falls.	Chase.	1,234	5	57.9	—	92	17	25	12	51	1.35	—	0.50	0.0	7	17	6	8	s.	E. B. Greene.	
Council Grove.	Morris.	1,191	—	59.6 ^c	—	90	17	27	13	45	1.02	—	1.03	0.0	1	29	0	2	n.	Geo. W. Cleek, jr.	
Cunningham.	Kingman.	1,680	21	58.3	+ 0.4	90 ^a	17	26	12	45 ^a	2.75	+ 0.84	1.25	0.0	4	19	3	9	s.	W. H. Morton.	
Dodge City.	Ford.	2,513	35	56.3	+ 1.5	88	2	26	12	39	0.92	- 0.48	0.32	T.	8	19	7	7	s.	U. S. Weather Bureau.	
El Dorado.	Butler.	1,291	7	58.9	—	90	5	24	12	40	2.36	—	0.88	0.0	5	21	3	7	s.	W. Y. Miller.	
Ellinwood.	Barton.	1,785	15	57.5	- 0.2	90	3	23	12	42	2.40	+ 0.44	1.47	T.	8	13	11	7	nw.	Martin Musil.	
Emporia.	Lyon.	1,138	25	58.4	+ 1.0	93	1	25	12	45	1.83	- 0.91	1.04	0.0	4	16	9	6	s.	W. H. Boyles.	
Eureka.	Greenwood.	1,093	11	58.3	—	92	17	25	12	48	2.00	- 1.05	0.80	0.0	5	19	7	5	s.	T. C. Peffer.	
Fall River.	do.	925	13	59.2	—	94	1	25	12	49	1.54	- 0.53	0.70	0.0	8	20	7	4	s.	J. McDaniel.	
Fargo.	Seward.	864	6	62.0	—	93	17	22	12	51	1.95	—	0.89	0.0	5	16	6	9	s.	Frank Swink.	
Frederon.	Wilson.	—	—	—	—	—	—	—	—	—	—	—	0.50	T.	5	21	3	8	s.	B. W. Holmes.	
Garden City.	Finney.	2,836	15	56.0	+ 0.4	90	2	26	11	51	0.75	- 0.32	0.30	T.	4	20	4	7	s.	B. F. Stocks.	
Great Bend.	Barton.	1,850	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	s.	J. A. Pritchard.	
Greensburg.	Kiowa.	2,235	2	56.7	—	88	17	25	12	42	3.37	—	2.48	T.	7	20	5	6	s.	C. C. Raymond.	
Grenola.	Elk.	1,116	22	58.2	- 1.1	92	17	22	12	45	2.17	- 0.56	0.72	0.0	6	21	4	6	s.	R. M. Lawyer.	
Howard.	do.	1,112	2	56.8	—	89	2	23	12	59	2.27	—	1.00	0.0	4	22	3	6	sw.	J. W. Eby.	
Hugoton.	Stevens.	5	—	56.8	—	89	2	23	12	59	2.27	—	1.55	0.0	3	21	0	10	s.	J. A. Firmin.	
Hutchinson.	Reno.	1,535	19	58.0	- 0.8	92	17	24	12	45	2.35	+ 0.26	1.45	0.0	5	22	2	7	nw.	E. S. Webster.	
Independence.	Montgomery.	816	37	61.0	+ 0.8	93	4	25	12	41	2.02	- 0.90	0.02	0.0	6	17	7	7	s.	J. M. Altaffer.	
Iola.	Allen.	984	3	58.1	—	91	1	26	12	39	1.90	—	0.75	0.0	7	17	4	10	s.	U. S. Weather Bureau.	
Jetmore.	Hodgeman.	2,268	8	58.8	—	90	2	20	12	47	0.81	—	0.40	T.	4	15	12	4	sw.	James Aikin.	
Kingman.	Kingman.	1,504	1	59.5	—	92	4	23	12	45	2.72	—	0.97	0.0	8	21	4	6	s.	B. B. Anawalt.	
La Crosse.	Rush.	2,061	7	55.4 ^d	—	90 ^a	21	20 ^a	12	45 ^a	1.54	—	0.94	T.	4	24	5	5	se.	Rodney Torrey.	
Lakin.	Kearney.	2,993	10	54.0	- 2.0	88	17	26	12	52	0.86	- 0.07	0.60	0.0	4	14	10	7	se.	C. H. Longstreth.	
Larned.	Pawnee.	2,020	5	56.6	—	90	27	25	12	40	1.86	—	0.94	T.	7	21	3	7	s.	H. H. Wolcott.	
Lebo.	Coffey.	1,138	23	57.8 ^e	+ 0.5	90 ^a	26 ^a	28 ^a	12	41	1.50	- 1.23	0.66	0.0	6	20	5	6	s.	J. J. Bowman.	
Le Roy.	do.	990	—	—	—	—	—	—	—	—	—	—	0.73	0.0	6	20	0	11	s.	F. W. Schmitt.	
Liberal.	Seward.	2,843	2	57.2	—	89	2	29	12	45	1.38	—	0.73	0.0	6	20	5	6	s.	R. T. Nichols.	
Macksville.	Stafford.	2,032	16	56.7	+ 0.4	88	17	25	12	39	2.26	+ 0.07	1.25	T.	5	19	3	9	s.	Mrs. Nelia Poling.	
McPherson.	McPherson.	1,495	19	59.3	+ 1.2	93	3	23	12	40	2.17	- 0.55	1.22	0.0	4	22	4	6	sw.	Ed. F. Haberlein.	
Madison.	Greenwood.	1,074	8	58.0 ^f	+ 1.2	94 ^d	1	23 ^d	12	53 ^d	1.33	—	0.87	0.0	3	12	11	4	se.	C. A. David.	
Marion.	Marion.	1,310	15	58.4	- 0.5	92	17	24	12	44	1.32	- 0.96	0.73	0.0	4	18	9	4	s.	D. D. McIntosh.	
Medora.	Barber.	1,475	16	57.6	- 1.8	92	17	26	12	51	2.82	+ 0.93	1.13	0.0	8	23	3	6	s.	S. P. Garrison.	
Mt. Hope.	Reno.	1,410	12	56.4 ^g	—	91 ^e	2	29 ^e	10	54 ^e	1.13	+ 0.30	0.86	0.0	5	22	0	9	s.	M. L. Rienbrode.	
Sedgwick.	Pontotoc.	1,001	3	63.2	—	93	4	37	12	45	2.29	—	1.33	0.0	3	25	1	5	s.	H. N. Renfrew.	
Newton.	Caddo.	1,575	16	62.6	+ 1.3	91	31	35	12	40	2.79	+ 0.55	1.61	0.0	3	24	4	3	s.	J. E. McLeod.	
Norwich.	Custer.	872	8	65.8	—	95	17	30	12	43	2.93	—	1.25	0.0	5	20	4	7	s.	J. K. Barnd.	
Oswego.	Lambette.	898	18	61.7	+ 1.4	93	17	25	12	46	2.20	- 0.84	0.64	0.0	4	16	8	7	se.	C. F. Walden.	
Pratt.	Pratt.	1,850	14	57.1 ^h	- 1.5	90 ^b	5	26 ^b	12	45 ^b	1.98	- 0.48	1.10	0.0	6	21	2	8	se.	N. I. Farris.	
Rome.	Summer.	1,218	12	59.1	- 0.1	91	1	23	12	49	3.46	+ 1.01	1.27	0.0	8	19	5	7	s.	E. H. Ellsworth.	
Sedan.	Chautauqua.	834	24	61.6	+ 1.8	92	2	20	12	45	2.15	- 0.21	1.05	0.0	6	22	4	5	s.	D. M. Adams.	
Toronto.	Woodson.	1,040	12	58.5	- 0.5	95	17	33	12	50	2.15	- 0.21	1.05	0.0	5	22	4	5	s.	A. Y. Buckles.	
Ulysses.	Grant.	3,027	15	56.4 ⁱ	- 0.8	91 ^e	2	29 ^e	10	54 ^e	1.13	+ 0.30	0.86	0.0	3	19	6	6	sw.	M. A. Webb.	
Walnut.	Crawford.	940	7	60.0	—	96	4	25	12	46	2.88	—	0.87	0.0	5	21	4	6	sw.	T. W. Marshall.	
Wichita.																					

TABLE 1.—Climatological data for October, 1909. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeted.	Number rainy days, 0.1 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
Oklahoma—Cont'd.																					
Hennessey.	Kingfisher.	1,166	15	63.0	— 1.3	95	1	33	12	45	3.92	+ 1.58	1.50	0.0	3	16	11	.4	s.		
Harbert.	Kiowa.	1,396	6	62.4	+ 0.5	98	4†	38	10†	40	1.71	0.85	0.0	0	3	24	4	3	s.		
Holdenville.	Hughes.	900	9	63.0	+ 0.2	94	5	33	24	46	0.91	0.46	0.0	0	2	29	0	2	s.		
Hocker.	Texas.	2,999	4	54.8	+ 0.4	84	3	31	24	45	1.57	0.90	0.0	0	5	21	5	12	n.		
Hurley.	Cimarron.	1	54.1	90	30	28	25	52	2.00		0.80	T.			4	21	5	5	sw.		
Idabel.	McCurtain.	474	3	56.9	+ 0.5	90	1†	30	12	44	4.43	+ 2.02	1.55	0.0	4	21	4	6	s.		
Jefferson.	Grant.	1,062	16	59.9	+ 0.5	90	1†	30	12	44	4.43	+ 2.02	1.55	0.0	4	22	1	8	s.		
Kenton.	Cimarron.	4,000	10	55.7	+ 0.2	89	1	30	23	49	1.05	+ 0.13	0.40	T.	4	19	3	4	s.		
Kingfisher.	Kingfisher.	1,046	12	63.4	+ 0.1	95	5	36	10†	45	2.41	- 0.21	0.04	0	3	19	1	2	s.		
McAlester.	Pittsburg.	698	17	65.0	+ 0.3	92	14	35	24	44	1.40	- 0.28	1.04	0.0	2	18	1	2	s.		
McComb.	Pottawatomie.	1,200	15	62.1	+ 0.3	91	5	33	24	45	2.50	- 0.05	1.10	0.0	3	20	0	3	..		
Mangum.	Greer.	1,585	17	60.6*	+ 2.5	90*	3†	37	12†	45	3.17	+ 1.29	1.78	0.0	4	28	0	3	..		
Marlow.	Stephens.	1,292	9	63.8	+ 1.0	92	4†	38	24	46	0.88	- 1.50	0.35	0.0	4	21	6	6	se.		
Meeker.	Lincoln.	1,030	16	61.6	+ 0.2	95	6	32	24	52	1.10	- 0.99	0.60	0.0	3	21	3	7	s.		
Muskogee.	Muscookee.	614	11	64.5	+ 2.2	95	2†	32	12	42	2.10	- 1.43	1.15	0.0	3	17	6	8	s.		
Mutual.	Woodward.	3	61.0	91	2†	35	10†	47	3.34		2.35				2	21	4	6	s.		
Neola.	Caddo.	1,500	4	62.8	+ 0.2	91	4	36	12	40	2.08		1.14	0.0	3	25	3	3	s.		
Newkirk.	Kay.	1,149	13	61.9	+ 0.2	95	3†	33	12	42	2.73	+ 0.46	0.91	0.0	5	21	5	5	s.		
Norman.	Cleveland.	1,171	16	64.1	+ 1.2	95	14	33	10†	53	1.80	- 0.48	1.10	0.0	4	16	10	5	s.		
Okeene.	Blaine.	1,194	6	61.6	+ 0.2	93	1†	35	10	42	4.67		2.60	0.0	4	21	5	5	s.		
Oklahoma.	Oklahoma.	1,247	20	62.3	+ 1.0	90	1	36	24	35	1.73	- 0.08	1.41	0.0	4	19	6	6	s.		
Omulgee.	Omulgee.	752	7	63.24	94*	5	28*	24	57	1.89		0.92	0.0	3	18*	5*	5*	s.			
Pauls Valley.	Garvin.	890	10	60.1	+ 0.6	94	1†	30	24	47	1.55	- 1.59	0.67	0.0	4	25	2	3	s.		
Pawhuska.	Osage.	918	11	63.0	+ 0.6	94	1†	34	24	42	2.86	+ 0.16	1.33	0.0	4	22	3	6	s.		
Perry.	Noble.	1,080	12	63.0	+ 0.6	94	1†	36	10†	46	2.05		0.88	0.0	4	24	2	5	s.		
Ravia.	Johnson.	796	8	65.6		95	5	36	12	42	2.73	+ 0.46	0.91	0.0	5	21	5	5	s.		
Sac and Fox Agency.	Canadian.	900	17	62.6		93	1†	33	24	46	1.71		1.13	0.0	4	22	2	7	s.		
Shawnee.	Pottawatomie.	1,041	9	62.6		93	1†	33	24	46	1.71		1.13	0.0	4	22	2	7	s.		
Snyder.	Kiowa.	1,356	3	64.2	+ 1.0	91	14	37	24	45	1.42		0.75	0.0	3	23	5	3	s.		
Sullivan.	Payne.	880	17	60.6	+ 1.0	92	1†	34	24	47	2.17	- 0.31	1.11	0.0	5	21	1	7	s.		
Supply.	Woodward.	2	55.3	89	2†	30	19	43	2.54		2.38	0.0	3	20	8	3	s.				
Tampa.	Comanche.	925	6	58.8		91	4	28	12	41	1.88		0.80	0.0	5	19	4	8	s.		
Tulsa (1).	Tulsa.	700	21	62.1	+ 0.3	94	1†	30	24	47	1.55	- 1.59	0.67	0.0	4	25	2	3	s.		
Tulsa (2).	do.	702	5	61.7	+ 1.2	95	1†	25	12	49	2.40		0.80	0.0	6	18	6	9	s.		
Vinita.	Craig.	698	6	61.7	+ 0.2	95	1†	31	12	49	2.40		0.80	0.0	6	18	6	9	s.		
Wagoner.	Wagoner.	588	13	63.2	+ 0.3	94	3	29	24	41	2.10	- 0.88	0.79	0.0	5	20	3	8	s.		
Waupomis.	Garfield.	1,253	11	61.6	+ 1.9	94	4	34	13	45	4.62	+ 1.84	1.65	0.0	5	20	6	5	sw.		
Weatherford.	Custer.	1,639	8	63.8		91	3†	38	26	42	3.15		1.41	0.0	5	23	3	6	s.		
Webers Falls.	Muskogee.	479	11	61.6	+ 0.0	94	6	20	13†	48	1.46	- 1.71	0.60	0.0	4	14	12	5	e.		
Whiteside.	Kay.	945	4	63.5		93	1	28	12	42	2.36		0.89	0.0	6	24	6	1	s.		
Woodward.	Woodward.	..	1	59.4		89	16	32	10	45	2.95		2.40	0.0	4	23	1	7	s.		
Missouri.	Maries.	17	60.1	+ 0.3	89	3†	24	13	50	0.37	- 2.04	0.22	0.0	2	11	7	4	s.			
Belle.	Shannon.	1,200	15	59.0	+ 1.2	93	4	25	13	30	1.88*	- 0.16	0.95*	0.0	2	19	4*	5	nw.		
Birchtree.	Cape Girardeau.	348	4	59.6	+ 0.2	94	1†	31	13	30	1.88*	- 0.16	0.95*	0.0	2	19	4*	5	nw.		
Cape Girardeau.	Cape Girardeau.	18	61.5	+ 2.0	95	4	30	12	45	2.36	+ 0.16	1.23	0.0	4	24	0	7	e.			
Caruthersville.	Pemiscot.	10	60.0	- 0.7	94	3	24	12	50	1.2	+ 1.11	1.82	0.0	7b	20b	1b	8	s.			
Dean.	McDonald.	440	5	57.6		88	3†	25	13	42	0.75		0.57	0.0	2	19	2	9	s.		
Dolphin.	Ripley.	889	23	53.6		88	3	26	13	41	2.46		0.77	T.	5	17	0	9	s.		
Farmington.	St. Francois.	18	55.8		91	4	28	12	41	1.88		0.80	0.0	5	19	4	8	s.			
Gano.	Dent.	900	4	55.3		89	3†	21	13	43	1.94		1.08	0.0	5	20	3	8	s.		
Goodland.	Iron.	14	59.2	+ 1.4	96	3	23	13	53	0.75	- 1.14	0.75	0.0	1	19	12	0	s.			
Greenville.	Wayne.	925	31	55.0	+ 0.8	90	3	21	13	42	0.88	- 1.85	0.40	T.	4	18	4	7	n.		
Ironton.	Iron.	458	18	55.5	+ 1.9	91	3	25	13	43	1.14	- 1.63	0.78	T.	5	16	8	7	s.		
Jackson.	Cape Girardeau.	979	30	62.8		90	3	28	12	31	2.83	- 0.31	1.40	0.0	3	23	1	7	s.		
Joplin.	Jasper.	911	9	61.7		92	3†	30	13	34	1.38		0.80	0.0	4	19	10	2	se.		
Kashkonong.	Oregon.	964	28	60.2	+ 1.6	95	4†	25	12	45	1.74	- 1.37	0.76	0.0	3	20	3	8	s.		
Lamar.	Barton.	420	16	57.8	+ 0.4	91	4	28	12	44	1.15	- 1.04	1.15	0.0	1	20	10	1	s.		
Marble Hill.	Butler.	343	1	52.2		81	7	21	13	42	0.10*		0.10*	0.0	1	14	0	12	s.		
Marshall.	Scott.	328	14	60.1	+ 0.7	90	3	27	13	41	1.27	- 1.19	1.10	0.0	3	22	3	7	sw.		
Mayes.	Springfield.	1,350	22	59.4	+ 2.1	90	3	27	13	32	2.29	- 0.51	1.43	0.0	8	20	3	6	nw.		
Seeville.	Crawford.	1,746	12	58.0		90	3	23	13	56	1.99	- 0.21	0.81	0.0	4	22	3	6	s.		
Willow Springs.	Howell.	1,300	16	58.8	+ 1.3	94	4	24	13	42	3.03	+ 0.72	1.30	0.0	3	20	3	8	se.		
Kentucky.	Ballard.	445	29	57.3	+ 0.6	85	3	29	13	30	2.72	- 0.06	2.45	0.0	5	18	10	5	sw.		
Blandineville.	Graves.	8	59.2		88	4	26	13	39	1.58		0.93	0.0	5	27	0	4	sw.			
Lynville.																					
Tennessee.																					
Arlington.	Shelby.	28	58.0	+ 1.2	91	5	27	13	47	1.04	- 1.11	0.54	0.0	2	23	3	5	s.			
Bolivar.	Hardeman.	450	25	58.2*	+ 1.0	88	4	28	13	43*	1.01	- 1.73	0.53	0.0	3						

MONTHLY WEATHER REVIEW.

OCTOBER, 1909

TABLE 1.—*Climatological data for October, 1909. District No. 7—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Observers.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.	Number of rainy days .01 inch or more.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	
<i>Arkansas—Cont'd.</i>																			
Calico Rock.	Izard.	361	5								0.74	0.54	0.0	3	21	2	8	W. H. Stoner.	
Camden.	Ouachita.	158	24	65.3	+ 1.9	96	5	33	25	45	2.12	- 0.24	0.96	0.0	5	21	2	8	R. H. Quarterman.
Centerpoint.	Howard.	9	67.0			97	6	39	24†	45	4.50	0.54	3.00	0.0	3	23	5	3	J. M. Huddleston.
Clarendon.	Monroe.	171	5									0.45	0.0						Mrs. B. E. Bishop.
Conway.	Faulkner.	309	26	61.8	+ 0.7	93	5	32	13	41	1.91	- 0.26	0.74	0.0	4	21	7	3	G. H. Burr.
Corning.	Clay.	293	17	60.4	+ 1.6	93	4	28	13	43	1.28	- 1.19	1.24	0.0	3	18	8	5	Jacob Brobst.
Dardanelle.	Yell.	330	23	62.4		96	3†	34	13	53	3.38	+ 1.08	3.00	0.0	3	21	6	4	A. Bernard.
Dodd City.	Marion.	1,175	28	61.7*	+ 1.5	92	4†	29	13	41	2.93	- 0.03	1.70	0.0	2				Neal Dodd.
Dutton.	Madison.	8	59.2			91	5†	28	13	44	4.00		1.62	0.0	4	17	11	3	T. S. Williamson.
Earl.	Crittenden.	33	62.4†			92	4	29	13	43	0.94		0.94	0.0	1				W. J. Moss.
Eldorado.	Union.	265	5	64.8		92	5†	36	25	39	1.50		1.24	0.0	3	22	1	8	Fred A. Babb.
England.	Lonoce.	8	63.2			92	6	31	13	48	0.32		0.32	0.0	1	21	8	2	J. C. Chenault.
Eureka Springs.	Carroll.	8	59.6*			94	3	35	28	35†	3.33		1.95	0.0	4	13	10	8	Jas. T. Pomeroy.
Fayetteville.	Washington.	1,451	20	64.3*	+ 3.9	96	6	28	12	42*	3.63	+ 0.58	1.28	0.0	2	22	5	4	University of Arkansas.
Fort Smith.	Sebastian.	481	27	63.9	+ 2.2	92	4	36	13	38	3.83	+ 1.00	1.81	0.0	6	22	5	4	U. S. Weather Bureau.
Fulton.	Hempstead.	264	5									1.60		1.10	0.0	2			B. C. Logan.
Hardy.	Sharp.	643	11	61.8	+ 0.6	91	3†	31	13	43	0.70	- 1.71	0.53	0.0	3	18	6	7	C. A. Caywood.
Helena (1).	Phillip.	182	24	63.0	+ 0.7	93	4†	32	13	43	0.62	- 1.73	0.52	0.0	2	23	0	8	Robert Kyle.
Helena (2).	do.	183	8															B. F. Modisett.	
Hot Springs.	Garland.	600	3	61.2		92	6	30	13	46	2.90		2.00	0.0	3	27	3	1	Hot Spring Water Co.
Huttig.	Union.	85	66.0*			91	5†	33	25	41*	1.63		1.52	0.0	3			C. A. Berry.	
Jonesboro.	Craighead.	345	14	61.2		94	4	26	13	44	0.31	- 2.35	0.31	0.0	1	25	6	0	Benedictine Sisters.
Junction.	Union.	16	64.6*	+ 1.1		89	8	34	25	38†	1.40	- 1.82	0.86	0.0	2	24			J. A. Lowderback.
Lacrosse.	Izard.	15																R. E. Kennard.	
Lake Farm.	Jefferson.	195	2	63.6		96	3	30	13	51	1.10		1.10	0.0	1	24	7	0	F. H. Gilleplee.
Lewisville.	Lafayette.	262	6	67.8		96	5	36	25	46	3.17		1.70	0.0	5	21	6	4	F. W. Youmans.
Little Rock.	Pulaski.	357	30	64.2	+ 1.3	90	5	40	13	30	0.84	- 1.71	0.30	0.0	6	22	5	4	U. S. Weather Bureau.
Lutherville.	Johnson.	775	12	62.3	+ 0.5	95	4	30	13	43	4.68		2.96	0.0	3	20	8	3	Herman Hentschel.
McNeil.	Columbia.	321	3	66.0*		96	6	35	25	44	2.81		1.52	0.0	3	23	5	3	L. A. Smith.
Maivern.	Hot Spring.	277	22	62.4	- 0.7	92	6	32	25	43	1.63	- 0.53	1.43	0.0	2	13	4	14	Miss L. C. Smith.
Mammoth Spring.	Fulton.	5	58.6			90	4	25	13	47	1.16		0.78	0.0	4	16	15	0	F. Wallack.
Marked Tree.	Poinsett.	5										T.	T.	0.0	0			L. Smith.	
Mena.	Polk.	1,100	23	64.4	+ 2.0	91	6	34	13	36	3.43	+ 1.00	1.99	0.0	5	26	2	3	D. H. Hopkins.
Mossdale.	Newton.	16	59.4	- 0.1		90	4†	27	12	33	4.31	+ 0.73	2.10	0.0	3	21	7	3	Theo. Ober.
Mount Nebo.	Yell.	1,750	19	62.0	+ 1.4	87	4	34	12	31	4.84	+ 2.54	2.50	0.0	4	26	0	5	T. G. Church.
Newport (1).	Jackson.	231	25	60.6	- 0.1	89	4	31	13	46	0.83	- 1.12	0.75	0.0	5	25	0	6	Mrs. A. B. Hillhouse.
Newport (2).	do.	231																A. V. Hughes.	
Ozark.	Franklin.	377	18	65.4*	+ 1.5	97	4†	38	13	39	41.2	+ 1.44	1.82	0.0	4	23	6	2	R. M. Adams.
Pine Bluff.	Jefferson.	215	21	66.0	+ 2.7	94	5	34	13	46	0.90	- 1.09	0.90	0.0	1	23	3	5	J. H. Hudson.
Pocahontas.	Randolph.	17	62.2	+ 2.5		93	4	27	13	44	0.51	- 1.84	0.46	0.0	2	17	12	2	Benedictine Sisters.
Pond.	Benton.	1,250	13	60.9	+ 1.5	93	3	32	12	44	4.20	+ 1.41	1.95	0.0	6	11	10	10	A. F. Stevens.
Portland.	Ashley.	122	2	65.9		98	5	33	25	45	1.30		1.30	0.0	1	20	3	3	T. A. Corson.
Prescott.	Nevada.	327	21	65.3	+ 1.1	97	6	34	25	47	3.56	+ 1.22	2.72	0.0	4	22	2	7	A. M. Eilsworth.
Princeton.	Dallas.	287	8									T.	T.	0.0	0			Carl D. R. Feaster.	
Rogers.	Benton.	1,355	18	60.8	+ 1.3	94	3	28	12	43	3.25	+ 0.65	1.89	0.0	5	19	6	6	J. A. Stark.
Russellville.	Pope.	348	24															J. F. Hodgins.	
Spielerville.	Logan.	1,060	13	64.2	+ 0.5	95	3	33	13	42	3.57	+ 0.63	2.35	0.0	5	19	5	7	New Subiaco Abbey.
Springbank.	Miller.	182	2	63.7	- 0.5	93	5	34	25	44	2.08	- 1.56	1.98	0.0	2	19	5	7	G. Field.
Stuttgart.	Arkansas.	495	23	63.5	+ 2.0	97	3	32	13	41	0.66	- 2.16	0.66	0.0	1	24	5	2	H. A. Buerkle.
Texarkana.	Miller.	332	25	65.6	- 0.2	92	6	41	24	39	3.75	+ 1.24	3.35	0.0	3	23	5	2	W. B. Weeks.
Warren.	Bradley.	304	14	63.7	- 0.5	93	5	34	25	44	2.08	- 1.56	1.98	0.0	4	19	5	7	John E. Peyton.
Whitecliffs.	Little River.	206	5	62.6	- 1.1	94	5	29	13†	48	3.51	+ 0.56	2.68	0.0	3	20	9	2	S. D. Jester.
Wiggs.	Garland.	16	61.3			91	5	30	13	50	0.60		0.33	0.0	4	23	2	6	R. R. Poole.
Wynne.	Cross.	1																	
<i>Mississippi.</i>	Sharkey.	1	64.4			90	6	35	13†	38	2.71		1.83	0.0	2	23	3	5	E. W. Cook.
Anguilla.	Tunica.	200	13	61.8	- 0.8	90	5	29	13	42	1.23	- 1.05	1.23	0.0	1	27	2	3	H. J. Irvine.
Batesville.	Panola.	230	22	61.8	+ 0.5	95	5	30	13†	55	0.24	- 1.45	0.16	0.0	2	26	1	4	J. M. Cox.
Byhalia.	Marshall.	390																Tallahatchie Dng. Com.	
Canton.	Madison.	228	19	66.0	+ 1.6	92	5†	30	25	45	0.06	- 2.10	0.05	0.0	3	18	9	4	Dr. G. W. Smith-Vansil.
Clarkesdale.	Coahoma.	177	2	63.2*		93	5	31	13	46	0.95		0.65	0.0	2	25	1	5	J. F. Durham.
Coffeeville.	Yalobusha.	490																Tallahatchie Dng. Com.	
Corinth.	Alcorn.	430	21	60.4	- 0.5	90	5	31	25	41	1.27	+ 0.79	1.90	0.0	1	28	2	3	Milton A. Chandler.
Crenshaw.	Panola.	187																Tallahatchie Dng. Com. Do.	
Denmark.	Lafayette.																	W. H. Eskridge.	
Duck Hill.	Montgomery.	10	63.8			94	4†	29	25	49	0.30		0.30	0.0	1	23	7	1	C. R. Knox.
Edwards.	Hinds.	222	22	66.5	+ 1.1	94	6	33	25	39	1.35	- 1.09	1.30	0.0	2	22	8	1	Tallahatchie Dng. Com. T. L. Darden.
Enid.	Tallahatchie.																	F. L. Harbison.	
Fayette.	Jefferson.	282	8	66.2*	+ 1.3	92	6	33	25	42	1.32	- 1.12	1.82	0.0	1	25	2	2	J. H. Stephenson.
Greenville.	Washington.	126	22	64.8	+ 0.6	91	5	35	25	43	1.55	- 0.48	0.92	0.0	3	26	1	4	Tallahatchie Dng. Com. Miss Josephine G. Jones.
Greenwood.	Le Flore.	140	9	63.2	- 0.3	93	5	32	25	43	1.52	- 0.30	1.04	0.0	4	12	7	1	Tallahatchie Dng. Com. T. L. Durbin.
Grenada.	De Soto.	391	21	63.4	+ 1.0	93	5	35	13†	47	1.20		1.10	0.0	4	26	1	4	E. W. Shelby.
Hernando.	Hicks.	435																Tallahatchie Dng. Com. S. W. Pegram.	
Hickory Flat.	Marshall.	600	22	60.8	- 0.9	88	5	33	13	43	0.61	- 1.46	0.24	0.0	4	25	0	6	Tallahatchie Dng. Com. L. B. Moesby.
Kosciusko.	Attala.	430	19	61.3	- 0.5														

TABLE 1.—Climatological data for October, 1909. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Departure from the normal.			Highest.	Lowest.	Greatest daily range.	Date.	Total.	Departure from the normal.			Greatest in 24 hours.	Total snowfall unsealed.	Number of rainy days of 1 inch or more.	Number of clear days.	Number of partly cloudy days.	
				Mean.	Departure from the normal.	Date.						Mean.	Departure from the normal.	Date.						
Louisiana.																				
Abbeville.	Vermilion.	18	22	68.6	- 0.6	92	47	39	25	42	2.35	- 1.03	1.75	0.0	3	22	7	2	se.	
Alexandria.	Rapides.	77	21	68.6	+ 0.4	97	8	34	25 ^a	46	2.58	- 0.12	2.58	0.0	2	18	6	7	e.	
Amite.	Tangipahoa.	130	21	68.3	+ 0.4	92	5 ^b	35	25 ^c	43	3.00	+ 0.80	2.00	0.0	2	13	13	0	n.	
Baton Rouge.	E. Baton Rouge.	35	20	70.0	+ 2.3	96	5	38	25	36	1.40	- 1.38	1.40	0.0	2	24	1	6	c.	
Burnside.	Ascension.	20	9	—	—	97 ^d	6	40 ^d	25	40 ^e	1.94	—	0.97	0.0	3	21	6	4	n.	
Burwood.	Plaquemines.	1	19	75.8	+ 2.5	89	6 ^f	58	24	17	0.10	- 4.28	0.10	0.0	1	22	7	2	s.	
Cahoun.	Ouachita.	180	17	68.2	+ 2.2	93	5	33	25	42	1.89	- 0.52	1.70	0.0	2	22	6	6	e.	
Cameron.	Cameron.	6	14	71.9	+ 2.1	92	6	47	1	40 ^f	2.35	- 0.57	1.29	0.0	2	21	12	1	se.	
Cheneyville.	Rapides.	67	22	66.8	+ 1.0	94	5	32	25	46	1.92	- 0.49	1.29	0.0	2	19	10	n.		
Clinton.	East Feliciana.	113	20	68.8	- 0.2	91	5 ^f	37	25	38	1.39	- 1.13	0.80	0.0	3	19	1	6	e.	
Collinston.	Morehouse.	65	7	65.6 ^e	—	93 ^e	7	32 ^d	24	43 ^d	1.15	—	1.15	0.0	1	29	1	1	...	
Covington.	St. Tammany.	39	17	68.5	+ 1.6	96	6	38	25	42	2.48	- 0.17	2.01	0.0	2	20	4	7	n.	
Dobson.	Winn.	1	65.9 ^a	—	—	92	6 ^f	35 ^a	25	45	2.48	—	2.48	0.0	1	23	5	5	s.	
Donaldsonville.	Ascension.	33	19	71.7	+ 2.7	94	6	51	31	34	1.40	- 1.47	1.10	0.0	2	28	0	0	e.	
Farmerville.	Union.	177	19	64.7 ^d	+ 1.2	904	4 ^f	35 ^d	24	39 ^d	1.76	- 0.97	1.76	0.0	1	25	2	3	s.	
Ferriday.	Concordia.	3	65.8	—	—	93	7	32	25	40	2.85	—	2.85	0.0	1	28	0	3	n.	
Franklin.	St. Mary.	10	17	70.6	+ 2.0	95	5	41	25	40	1.98	- 1.09	0.95	0.0	3	18	4	9	n.	
Grand Cane.	De Soto.	302	3	66.5	—	95	6	41	2	49	4.10	—	2.30	0.0	3	25	1	5	s.	
Grand Coteau.	St. Landry.	93	17	70.2	+ 2.8	94	5	39	25	37	2.75	- 0.35	2.30	0.0	2	25	5	1	sw.	
Hammond.	Tangipahoa.	44	10	68.4	+ 1.3	94	5 ^f	36	25	40	1.13	- 1.73	0.52	0.0	3	28	1	1	se.	
Houma.	Terrebonne.	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Jeaning.	Calcasieu.	30	11	69.7	+ 1.2	95	5	43	25	40	1.82	- 2.05	1.80	0.0	3	19	8	4	ne.	
Lafayette.	Lafayette.	36	22	69.1	+ 1.3	93	5	38	25	42	2.26	- 0.73	1.79	0.0	4	21	5	5	e.	
Lake Charles.	Calcasieu.	22	21	68.6	+ 0.1	96	5	39	25	46	3.34	- 0.18	2.37	0.0	2	25	0	4	n.	
Lakeside.	Cameron.	8	70.5	—	—	94	5 ^f	42	24 ^c	33	2.07	—	2.07	0.0	1	27	0	4	ne.	
Lawrence.	Plaquemines.	6	19	70.3	0.0	92	5	49	24	50	2.78	- 0.12	2.25	0.0	3	25	4	2	n.	
Liberty Hill.	Bienville.	22	69.6	+ 3.7	96	5	33	25	50	1.49	- 1.40	1.43	0.0	2	25	2	4	n.		
Logansport.	De Soto.	192	4	—	—	—	—	—	—	—	2.46	—	1.50	0.0	3	19	6	6	s.	
Menville.	St. Landry.	45	22	67.2	0.0	93	5 ^f	35	25	45	1.98	- 0.76	1.45	0.0	2	20	3	5	ne.	
Minden.	Webster.	194	21	65.7	+ 0.2	96	5	36	25 ^c	48	1.80	- 0.97	1.60	0.0	1	22	3	6	s.	
Monroe.	Ouachita.	82	22	67.3	+ 1.5	92	5	39	25	44	1.60	- 0.87	1.60	0.0	1	25	2	4	s.	
Morgan City.	St. Mary.	14	4	—	—	—	—	—	—	—	1.26	—	0.98	0.0	2	22	3	6	ne.	
Newellton.	Tensas.	2	64.5	—	—	89	8	35	25	47	3.57	- 1.81	1.65	0.0	2	17	13	1	n.	
New Iberia.	Iberia.	15	19	70.0	+ 1.3	90 ^a	5 ^f	43	25	43 ^a	2.70	- 0.05	2.00	0.0	3	18	9	4	se.	
New Orleans (1).	Orleans.	15	35	72.4	+ 2.9	91	5	51	24	25	3.63	+ 0.70	2.21	0.0	5	19	10	2	e.	
New Orleans (2).	do.	18	22	71.2	+ 2.7	89	5 ^f	44	25	31	2.70	+ 1.26	1.80	0.0	6	23	5	3	s.	
New Orleans (3).	do.	—	—	—	—	—	—	—	—	—	3.58	—	2.48	0.0	4	—	—	—	—	
New Orleans (4).	do.	—	—	—	—	—	—	—	—	—	3.57	—	1.76	0.0	6	—	—	—	—	
New Orleans (5).	do.	—	—	—	—	—	—	—	—	—	5.36	—	3.41	0.0	4	—	—	—	—	
New Orleans (6).	do.	—	—	—	—	—	—	—	—	—	3.70	—	2.24	0.0	4	—	—	—	—	
New Orleans (7).	do.	—	—	—	—	—	—	—	—	—	3.83	—	2.30	0.0	4	—	—	—	—	
New Orleans (8).	do.	—	—	—	—	—	—	—	—	—	3.38	—	1.90	0.0	4	—	—	—	—	
Opelousas.	St. Landry.	83	18	68.2	+ 0.8	95	5	35 ^a	25	42 ^a	2.20	- 0.57	1.70	0.0	2	21	1	9	n.	
Pearl River.	St. Tammany.	3	—	—	—	—	—	—	—	—	3.36	—	1.98	0.0	2	21	1	9	n.	
Plain Dealing.	Bossier.	268	17	67.6	+ 2.6	94	5 ^f	32	25	47	3.35	- 1.52	1.07	0.0	3	24	4	3	ne.	
Rays.	Acadia.	44	18	72.4	+ 2.9	92	5	40	25	35	2.00	- 0.77	1.90	0.0	3	21	2	8	n.	
Reserve.	St. John Baptist.	8	65.3	—	—	92	5 ^f	38	24 ^c	40	0.42	—	0.42	0.0	1	20	10	1	...	
Robeline.	Natchitoches.	147	14	65.2	+ 1.2	94	6	31	25	46	2.05	- 0.42	2.00	0.0	2	21	6	4	n.	
Ruston.	Lincoln.	312	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Schriever.	Terrebonne.	17	18	71.6	+ 3.5	98	5	40	25	44	1.44	- 1.47	0.78	0.0	3	20	2	9	e.	
Shreveport.	Caddo.	249	37	68.0	+ 2.4	90	5	43	25	32	1.27	- 1.91	1.10	0.0	4	25	2	4	se.	
Simmesport.	Avoyelles.	4	—	—	—	—	—	—	—	—	1.40	—	1.04	0.0	3	13	6	12	...	
Southern Univ. Farm.	Jefferson.	14	—	—	—	—	—	—	—	—	3.50	+ 1.25	1.60	0.0	6	19	8	4	se.	
St. Francisville.	West Feliciana.	115	5	65.6	—	92	5	41	25 ^c	44	1.50	—	1.50	0.0	1	25	2	4	ne.	
Sugartown.	Calcasieu.	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Tallulah.	Madison.	91	1	63.7	—	93	4	32	25	44	2.33	—	1.33	0.0	2	14	17	0	—	

* Precipitation included in that of the next measurement.
 ** Temperature extremes are from observed readings of the dry-bulb; means are computed from observed readings.
 † Also on other dates.
 § Data are from standard instruments not supplied by the U. S. Weather Bureau.
 || Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
 ¶ Estimated by observer.
 # Precipitation for the 24 hours ending on the morning when it is measured.
 T. Precipitation is less than 0.01 inch rain or melted snow.
 a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

TABLE 2—*Daily precipitation for October, 1909. District No. 7, Lower Mississippi Valley.*

TABLE 2.—*Daily precipitation for October, 1909. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for October, 1909. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for October, 1909.* District No. 7—Continued.

Stations.	River basins.	Day of month.																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.		
Arkansas—Cont'd.																																			
Lake Farm.	Arkansas.																																		1.10
Lewisville.	Red.	T.	1.70																															1.05	
Little Rock.	Arkansas.	18	12																															2.88	
Lutherville.	do.	2.96																																1.42	
McNeil.	Ouachita.	.47																																1.52	
Malvern .	Ouachita.																																	1.63	
Mammoth Spring.	White.	.01	.01																															T.	
Marked Tree .	St. Francis.																																	1.09	
Mena.	Ouachita.	21	1.78																															3.48	
Mossdale.	White.	2.10																																1.71	
Mount Nebo.	Arkansas.	2.50																																2.00	
Newport (1) .	White.	.03	.02																															0.88	
Newport (2) .	do.																																		
Osark.	Arkansas.	1.47		T.																														1.82	
Pine Bluff .	do.	.90																																0.00	
Pocahontas.	White.	.05																																0.51	
Fond.	Arkansas.	1.00		T.																														1.95	
Portland .	Ouachita.	1.30																																1.30	
Prescott .	do.	2.72																																3.55	
Princeton.	Arkansas.	261	1.02																															3.25	
Rogers.	do.																																		
Russellville .	do.	2.35																																3.57	
Spierville.	do.	2.00																																2.42	
Springbank .	Red.	.06																																0.66	
Stuttgart.	Arkansas.	3.35																																3.75	
Texarkana .	Red.	1.98																																2.08	
Warren .	Ouachita.	1.80																																2.70	
Whitecliff .	Red.	2.68	T.																															3.51	
Wiggs .	Ouachita.	.02																																0.66	
Wynne .	St. Francis.																																		
Mississippi.																																		2.87	
Anguilla.	Yazoo.	.88																																2.71	
Austin.	do.																																	1.23	
Batesville .	do.																																	0.24	
Byhalia.	do.																																	0.59	
Canton.	Big Black.	.05																																0.06	
Clarksville.	Yazoo.	.30																																0.93	
Coffeeville.	do.																																	0.32	
Corinth .	Mississippi.	32	10																														2.87		
Crenshaw.	Yazoo.	T.	.03																															1.15	
Denmark.	do.																																	1.10	
Duck Hill.	Big Black.	1.30																																1.35	
Edwards.	Yazoo.	1.32																																1.32	
Fayette.	Mississippi.	.92																																1.55	
Greenville .	Yazoo.	.04	.34																														1.52		
Grenada.	do.	1.00	.05																														1.20		
Hernando .	do.																																0.70		
Hickory Flat.	do.																																0.61		
Holly Springs .	do.																																0.37		
Kosciusko .	Big Black.	.03																															0.64		
Lake Comorant.	Yazoo.	.05																															1.09		
Lula.	do.																																T.		
Malone.	do.																																0.91		
Marks.	do.																																1.82		
Natchez .	Mississippi.	1.53	.29																														1.20		
New Albany.	Yazoo.	12	.20	.30																													1.02		
Pontotoc.	do.																																1.73		
Port Gibson .	Mississippi.	1.73																															1.20		
Ripley.	Yazoo.	.50																															1.11		
Rosedale.	do.																																0.88		
Senatobia.	Big Black.	1.33																															1.33		
Shoecoe.	Mississippi.	T.																															1.40		
Suffolk.	Ouachita.	1.70																															2.35		
Swan Lake .	Yazoo.	35																															1.88		
Tchula.	do.	1.39	.13																														1.42		
Cameron.	Coast.	.80	.57																														1.39		
Clinton .	Coast.	1.15																															1.15		
Collinston.	Ouachita.	2.01																															2.48		
Covington .	Coast.	2.48																															1.40		
Dodson.	Coast.	1.76																															1.40		
Donaldsonville .	Ouachita.	2.85																															2.85		
Ferriday.	do.	.82	.95																																

TABLE 2.—*Daily precipitation for October, 1909. District No. 7—Continued.*

TABLE 3.—*Maximum and minimum temperatures at selected stations, October, 1909.* District No. 7, Lower Mississippi Valley.

Date.	Colorado.				New Mexico.				Texas.				Kansas.				Oklahoma.											
	Lamar.		Leadville.		Pueblo.		Albert.		Cimarron.		Amarillo.		Paris. ^a		Dodge City.		Ellinwood.		Iola.		Liberal.		Wichita.		Ardmore. ^b		Barnevile.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Mid.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.	85	46	63	34	80	46	85	56	79	39	82	57	95	52	87	51	89	49	91	52	87	50	88	56	95	52	94	50
2.	90	44	65	31	82	44	81	51	73	35	83	54	95	54	88	57	89	55	90	52	87	59	95	55	94	52	94	52
3.	89	52	62	32	79	48	83	50	76	41	82	55	94	57	86	55	90	58	91	53	88	52	88	58	94	55	94	52
4.	89	60	58	32	80	49	79	51	73	37	80	52	94	58	86	59	89	47	90	51	86	68	89	61	93	56	93	51
5.	82	45	56	35	75	52	77	48	73	39	79	49	94	58	83	56	88	49	90	52	85	47	89	61	95	55	93	50
6.	73	50	46	31	72	52	71	48	61	39	78	52	95	50	81	53	87	51	89	52	83	45	87	58	95	55	94	52
7.	66	46	42	26	65	43	68	46	63	37	76	55	93	61	76	57	81	59	87	61	76	56	84	62	92	58	84	58
8.	56	35	29	13	47	36	60	41	48	34	57	37	74	62	60	40	75	45	79	56	84	33	66	44	73	57	79	62
9.	61	40	35	14	57	28	59	35	53	23	56	35	68	53	48	36	45	41	58	43	54	36	48	43	63	48	62	49
10.	60	37	44	27	69	36	74	39	66	30	71	42	76	39	69	35	64	40	54	43	71	39	62	43	73	40	65	45
11.	60	33	42	33	47	35	65	40	61	30	66	33	75	42	53	32	58	38	50	34	64	34	56	35	70	46	59	45
12.	58	35	50	25	48	35	58	37	62	34	58	29	64	42	58	26	54	23	50	26	56	36	51	28	63	39	55	28
13.	78	35	53	27	80	35	84	40	76	30	84	40	84	43	75	39	66	34	70	35	82	34	70	38	83	41	65	40
14.	77	43	55	28	81	45	88	54	78	43	79	50	93	51	77	46	75	38	75	41	80	46	76	45	92	53	83	42
15.	72	36	60	28	71	37	79	45	75	37	83	47	86	56	72	45	74	38	69	39	83	41	71	47	85	52	76	41
16.	64	35	60	29	64	36	83	46	80	40	83	45	87	54	72	42	74	44	75	41	80	40	75	50	87	59	77	42
17.	68	34	54	28	60	35	75	50	67	38	70	47	83	61	56	41	67	44	81	57	88	40	76	47	84	67	86	52
18.	62	36	56	24	53	34	59	39	51	38	47	36	86	61	48	39	54	41	48	43	52	38	49	44	80	63	62	49
19.	54	33	54	23	53	36	49	38	56	34	46	36	65	61	43	38	49	39	59	44	44	37	50	41	58	52	59	42
20.	79	33	48	29	77	30	75	42	74	32	75	40	78	53	55	42	60	44	63	51	68	35	59	47	74	48	69	50
21.	74	37	55	23	69	31	69	46	77	35	74	45	87	52	74	36	77	37	77	41	76	38	74	42	91	56	83	46
22.	70	34	49	24	68	35	64	37	66	35	71	48	87	61	71	40	72	50	80	45	73	47	72	43	85	57	86	57
23.	69	28	56	23	65	27	78	41	63	28	64	33	69	49	64	33	62	31	77	32	58	40	63	44	80	62	40	42
24.	83	28	53	30	77	30	66	45	77	24	74	38	70	49	77	38	72	37	60	28	79	35	62	34	66	36	65	31
25.	68	28	64	19	67	36	67	40	66	24	64	43	49	63	41	65	44	63	40	67	39	63	45	69	42	67	42	
26.	62	33	51	23	58	37	68	47	67	34	62	41	61	36	65	34	69	34	64	33	66	41	77	39	75	38	75	
27.	71	39	56	24	66	28	72	37	71	26	68	37	62	30	69	30	71	31	67	36	69	29	70	42	81	46	77	38
28.	60	27	50	24	76	28	74	40	76	30	76	43	63	34	73	41	74	33	74	39	72	35	73	46	83	51	79	40
29.	84	30	54	28	81	36	79	43	74	23	83	48	82	52	77	55	78	56	76	54	79	43	75	58	79	53	80	52
30.	79	32	48	27	72	33	74	45	69	29	81	50	81	52	85	49	87	55	81	58	55	45	80	60	59	53	53	
31.	64	40	38	12	58	33	67	42	58	32	62	47	81	53	66	44	78	51	69	52	72	42	75	49	80	60	73	68
Mns	71.8	36.9	51.8	25.9	67.6	36.8	71.9	43.6	68.2	33.2	71.5	44.2	82.9 ^b	53.4 ^b	69.5	43.0	71.9	43.1	71.7	44.4	73.1	41.4	70.6	47.3	80.2	51.4	76.5	47.4

Oklahoma.

MONTHLY WEATHER REVIEW.

Октябрь, 1909

TABLE 3.—*Maximum and minimum temperatures at selected stations, October, 1909.* District No. 7—Continued.

Tennessee.				Arkansas.																Mississippi.																																				
Date.	Memphis.		Union City.		Bentonville.				Corning.				Dardanelle.				Eldorado.				Fort Smith.				Little Rock.				Pine Bluff.				Texarkana.				Wynne.				Clarksdale.				Corinth.				Greenville.							
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.							
1..	75	56	81	43	90	56	79	46	89	46	88	60	91	57	80	58	87	52	89	50	79	51	84	49	76	48	87	49	76	50	84	49	76	48	87	49	76	50	84	49	76	48	87	49												
2..	80	57	84	42	90	52	82	45	92	52	87	53	92	58	81	60	88	52	90	55	84	50	85	50	79	44	86	53	79	44	86	53	79	44	86	53	79	44	86	53	79	44	86	53	79	44	86	53								
3..	82	57	89	48	91	54	88	50	96	50	87	52	91	60	84	53	90	53	88	56	85	52	87	48	84	46	87	50	85	52	87	48	84	46	87	50	85	52	87	48	84	46	87	50												
4..	86	61	96	56	90	51	93	51	96	50	90	52	92	56	89	60	92	50	93	53	90	55	91	53	93	53	90	53	91	53	93	53	90	53	91	53	90	53	91	53	90	53	91	53												
5..	86	65	86	55	89	50	84	52	96	50	92	53	93	53	90	63	94	52	89	55	91	53	93	53	90	53	91	53	93	53	90	53	91	53	90	53	91	53	90	53	91	53														
6..	82	62	85	47	90	51	80	53	95	53	92	56	92	57	83	63	90	55	92	57	83	55	89	54	90	55	89	54	90	55	89	54	90	55	89	54	90	55	89	54	90	55														
7..	84	59	86	42	88	61	83	46	94	55	90	55	89	64	85	63	90	57	90	58	87	54	82	50	89	59	87	54	82	50	89	59	87	54	82	50	89	59	87	54	82	50	89	59												
8..	81	65	84	48	89	57	84	49	84	58	82	58	76	84	85	60	81	63	82	59	86	56	82	59	86	56	82	59	86	56	82	59	86	56	82	59	86	56	82	59	86	56	82	59												
9..	73	62	76	62	76	56	48	77	67	65	59	65	61	58	49	71	56	73	60	62	77	64	64	77	64	63	77	64	63	77	64	63	77	64	63	77	64	63	77	64	63	77	64													
10..	67	52	72	53	61	42	72	48	72	42	72	45	66	43	68	48	72	44	74	43	69	41	49	48	68	41	49	48	68	41	49	48	68	41	49	48	68	41	49	48	68	41	49	48	68											
11..	64	48	67	47	68	35	67	45	68	44	74	49	63	43	65	48	75	45	71	46	68	41	72	49	67	45	70	46	68	41	72	49	67	45	70	46	68	41	72	49	67	45	70	46												
12..	54	40	59	33	50	28	58	31	60	39	63	46	53	37	52	43	60	42	60	45	57	31	41	56	37	61	46	57	31	41	56	37	61	46	57	31	41	56	37	61	46	57	31	41	56											
13..	63	40	67	25	67	34	65	26	71	34	78	43	74	36	64	40	70	34	79	46	64	30	68	31	65	30	72	37	64	30	68	31	65	30	72	37	64	30	68	31	65	30	72	37												
14..	78	55	63	46	80	48	82	40	88	35	87	48	85	50	84	54	87	60	86	50	83	53	80	50	76	44	81	54	80	50	76	44	81	54	80	50	76	44	81	54	80	50	76	44												
15..	70	51	69	37	72	41	73	32	82	44	82	49	79	47	76	58	83	45	80	59	73	41	79	44	81	46	81	46	81	46	81	46	81	46	81	46	81	46	81	46	81	46	81	46												
16..	71	50	75	35	73	44	76	33	68	44	84	50	60	50	64	54	80	53	82	59	73	38	77	42	74	40	82	49	75	40	82	49	75	40	82	49	75	40	82	49	75	40														
17..	79	59	82	56	81	57	84	57	86	43	85	51	80	55	80	56	85	56	85	61	81	43	85	54	85	54	85	54	85	54	85	54	85	54	85	54	85	54	85	54	85	54	85	54												
18..	79	54	81	53	68	47	83	57	85	55	82	57	81	60	81	54	85	55	80	60	84	55	80	50	82	54	85	50	82	54	85	50	82	54	85	50	82	54	85	50	82	54	85	50												
19..	66	52	68	49	59	47	64	47	64	52	67	57	60	52	60	51	80	54	86	68	55	66	50	75	50	72	52	74	52	74	52	74	52	74	52	74	52	74	52	74	52	74	52													
20..	74	61	69	55	67	53	69	54	75	52	80	56	71	55	72	55	70	41	68	43	75	35	65	38	66	42	65	38	66	42	65	38	66	42	65	38	66	42	65	38	66	42	65	38												
21..	77	64	83	63	79	51	82	55	85	55	85	57	82	57	82	61	88	56	84	62	80	61	84	64	80	62	84	64	80	62	84	64	80	62	84	64	80	62	84	64	80	62														
22..	78	64	83	55	82	52	82	52	86	55	86	55	84	58	81	61	88	58	85	62	83	57	85	55	85	55	85	55	85	55	85	55	85	55	85	55	85	55	85	55	85	55														
23..	69	48	74	48	52	42	77	50	65	38	69	60	66	45	73	48	74	56	67	57	63	54	76	55	68	56	73	55	68	56	73	55	68	56	73	55	68	56	73	55	68	56														
24..	55	42	59	43	60	36	60	40	68	39	64	38	61	39	61	43	73	38	61	41	57	40	63	42	53	40	63	42	53	40	63	42	53	40	63	42	53	40	63	42	53	40														
25..	63	41	66	29	68	42	67	31	70	34	69	36	70	41	68	43	75	35	68	42	65	38	66	34	71	36	68	34	71	36	68	34	71	36	68	34	71	36	68	34	71	36														
26..	70	49	74	35	69	40	74	35	75	35	76	38	71	45	73	48	82	40	71	42	73	39	77	35	71	36	78	38	77	35	71	36	78	38	77	35	71	36	78	38	77	35	71	36												
27..	67	51	76	36	72	40	70	45	75	40	73	43	72	45	71	52	83	43	74	46	70	42	73	41	75	41	77	45	70	41	75	41	77	45	70	41	75	41	77	45	70	41														
28..	68	46	75	33	75	41	69	33	76	40	78	43	75	49	71	47	86	44	75	47	69	42	75	39	76	37	73	37	77	43	76	37	73	37	77	43	76	37	73	37	77	43	76	37	73	37	77	43								
29..	73	47	78	32	73	52	75	32	80	41	78	43	76	52	74	48	86	40	76	51	77	43	78	37	75	36	80	41	78	37	75	36	80	41	78	37	75	36	80	41	78	37	75	36	80	41										
30..	75	50	79	33	76	53	78	35	82	42	80	44	77	53	77	50	86	42	79	52	76	44	81	37	77	36	82	41	78	37	77	36	82	41	78	37	77	36	82	41	78	37	77	36	82	41										
31..	78	59	80	47	68	54	80	53	68	42	81	50	71	60	76	60	80	53	75	54	78	47	83	37	78	40	80	33	78	37	78	40	80	33	78	37	78	40	80	33	78	37	78	40	80	33	78	37	78	40						
Mns	73.1	53.8	76.1	44.7	73.3	47.0	76.0	44.8	79.2	45.7	79.7	50.0	76.5	51.3	74.5	53.8	82.0	50.1	78.3	53.0	75.4	46.9	79.2	47.3	74.6	46.1	80.0	49.6	73.1	53.8	76.1	44.7	73.3	47.0	76.0	44.8	79.2	45.7	79.7	50.0	76.5	51.3	74.5	53.8	82.0	50.1	78.3	53.0	75.4	46.9	79.2	47.3	74.6	46.1	80.0	49.6

Date.	Mississippi.								Louisiana.																New Orleans.				Robeline. §§				Shreveport.								
	Kosciusko. §§				Natchez. §§				Vicksburg.				Alexandria. §§				Baton Rouge. §§				Covington. §§				Lafayette. §§				Lake Charles. §§				Monroe. §§				Robeline. §§				Schriever. §§
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.						
1.....	84	49	88	53	84	61	86	45	85	57	90	49	87	52	89	47	81	52	84	65	80	45	89	55	87	56	49	91	54	89	59	56									
2.....	83	47	85	56	82	63	88	49	87	58	93	53	87	54	90	54	87	54	84	67	84	49	91	54	89	59	56	49	91	54	88	58	56								
3.....	86	47	85	55	86	53	88	49	89	58	90	51	88	55	92	56	86	52	88	68	89	45	93	54	87	57	56	49	91	54	88	58	56								
4.....	90	50	93	58	87	63	93	50	92	58	93	51	92	54	94	52	89	55	89	69	92	46	95	52	88	56	56	49	91	54	88	58	56								
5.....	91	50	92	59	87	63	95	51	96	60	95	54	93	58	96	53	92	57	91	71	90	48	98	57	90	60	62	49	91	54	88	58	62								
6.....	90	51	90	60	90	65	93	50	92	63	96	57	92	60	95	57	90	58	90	72	94	51	97	58	90	62	62	49	91	54	88	58	62								
7.....	80	53	95	62	91	67	92	55	93	60	91	57	92	58	93	56	91	58	88	69	92	53	94	57	90	64	64	49	91	54	88	58	64								
8.....	85	56	90	66	85	65	97	55	85	66	88	59	87	63	89	54	83	87	71	81	53	92	62	79	61	61	49	91	54	88	58	61									
9.....	73	61	74	64	72	61	73	64	70	64	78	68	76	64	82	56	75	64	80	69	73	61	87	68	63	55	49	91	54	88	58	63									
10.....	73	57	74	55	70	55	75	50	76	60	79	62	74	56	80	50	74	49	74	66	76	42	80	49	74	46	46	49	91	54	88	58	46								
11.....	72	45	74	52	71	52	77	45	78	53	80	47	76	47	83	49	78	48	75	60	79	41	81	45	75	49	49	49	91	54	88	58	49								
12.....	61	42	66	49	62	47	69	46	66	52	76	47	74	50	78	49	78	47	70	60	68	41	83	48	65	47	47	49	91	54	88	58	47								
13.....	66	32	79	48	74	47	82	47	76	44	77	47	80	49	84	49	68	50	77	56	83	44	86	48	80	51	51	49	91	54	88	58	51								
14.....	83	36	86	64	82	63	88	52	84	61	87	48	86	52	85	49	87	45	85	68	89	51	89	54	87	66	66	49	91	54	88	58	66								
15.....	77	48	84	63	80	65	85	64	88	67	90	61	88	65	90	50	87	56	84	70	85	60	95	61	82	62	62	49	91	54	88	58	62								
16.....	78	41	88	57	83	56	86	54	82	54	90	49	85	50	88	50	89	53	70	63	90	51	91	51	82	63	63	49	91	54	88	58	63								
17.....	84	42	88	57	84	57	85	51	79	53	85	49	86	58	87	50	88	54	82	65	88	54	90	51	85	60	60	49	91	54	88	58	60								
18.....	82	42	88	58	82	60	85	60	82	52	84	50	86	60	86	56	86	49	85	55	83	67	53	91	52	80	60	60	49	91	54	88	58	60							
19.....	81	46	78	59	77	63	78	73	78	60	81	57	77	62	80	58	74	56	80	70	78	55	85	64	74	64	64	49	91	54	88	58	64								
20.....	79	55	86	64	81	66	82	64	87	65	83	65	85	64	87	60	83	62	84	70	80	64	89	62	82	62	62	49	91	54	88	58	63								
21.....	79	65	83	66	80	65	83	60	81	67	84	65	83	64	88	60	85	61	77	68	87	63	81	64	84	63	63	49	91	54	88	58	63								
22.....	84	53	90	62	84	63	78	57	87	63	87	66	86	61	87	60	89	58	81	68	87	55	89	61	84	61	61	49	91	54	88	58	61								
23.....	71	54	77	63	70	51	67	57	84	67	87	62	83	63	85	60	74	58	85	60	75	55	89	64	73	53	53	49	91	54	88	58	53								
24.....	59	39	64	44	61	43	65	43	65	47	68	47	65	46	76	46	75	42	63	51	74	35	89	45	64	44	44	49	91	54	88	58	44								
25.....	62	31	73	42	66	41	72	34	74	38	72	38	72	38	77	39	73	43	68	52	74	31	79	40	69	43	43	49	91	54	88	58	43								
26.....	74	32	81	42	75	51	59	34	84	50	79	39	83	41	84	39	79	39	77	50	81	33	87	44	76	49	49	49	91	54	88	58	49								
27.....	72	45	82	52	76	53	59	43	83	57	83	49	81	52	86	40	83	45	78	64	83	37	86	50	78	49	49	49	91	54	88	58	49								
28.....	73	44	80	53	77	53	51	43	81	55	83	47	81	48	83	50	83	45	78	62	80	39	86	52	78	52	52	49	91	54	88	58	52								
29.....	72	41	80	54	75	53	51	44	80	57	81	47	82	49	86	56	83	47	72	61	82	42	80	52	78	52	52	49	91	54	88	58	52								
30.....	78	36	85	54	80	52	54	50	82	56	84	46	83	55	87	50	89	45	78	50	84	44	89	55	79	54	54	49	91	54	88	58	54								
31.....	78	40	87	55	82	61	52	50	84	58	83	46	82	57	80	50	83	46	80	65	80	45	88	58	78	61	61	49	91	54	88	58	61								
Means.....	77.4	46.1	82.7	56.3	78.5	57.5	82.3	50.8	82.6	57.5	84.3	52.7	83.0	55.3	86.0	51.3	82.6	52.0	80.3	64.6	82.6	47.9	88.4	54.7	79.5	56.5	56.5	49	91	54	88	58	61								